



# **FREQUENCY OF TRICHOMONAS VAGINALIS INFECTION IN PREGNANT WOMEN REFERRED TO HEALTH AND MEDICAL CENTERS IN ARDABIL CITY, 2013-2014**

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Trichomoniasis, a protozoan infection with the prevalence of more than 170 million people worldwide, is a widespread infection which is transferred through sexual contact. *Trichomonas vaginalis* in women causes pelvic inflammatory disease, increased risk of fallopian tube dependent infertility, ectopic pregnancy, preterm labor, the birth of low weight infants and the increase in the possibility of HIV transmission. Considering the importance of *Trichomonas vaginalis* infection in pregnant women and lack of data from Ardabil city, this study was performed to identify this infection in pregnant women referred to health and medical centers. Vaginal discharge from 500 pregnant women was collected with sterile swap and disposable speculum and examined for *Trichomonas vaginalis* by direct microscopic examination and cultured in Diamond specific medium. A testimonial and questionnaire were completed for each case and the results were analyzed using descriptive and Chi-Square tests and by SPSS statistical software version 19. In this study, the culture of samples displayed 12 positive cases (2.4%). Furthermore *Trichomonas vaginalis* trophozoites were observed in five cases (1%) with microscopic examination. Among different clinical manifestations there was a significant relation between discharge and the infection. The present survey confirmed the frequency of *Trichomonas vaginalis* infection in pregnant women in this region. Therefore our results highlight the importance of preventive intervention in this group.

**Keywords:** *Trichomonas vaginalis*, trichomoniasis, pregnant women, Ardabil

# **STUDY OF THE PREVALENCE OF TRICHOMONAS VAGINALIS IN WOMEN REFERRED TO HEALTH CENTERS IN DEHLORAN COUNTY**

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Trichomoniasis is one of the most prevalent urogenital sexually transmitted diseases. *Trichomonas vaginalis* is flagellated protozoa living in human urogenital tract. This parasite has a trophozoite form and propagates via longitudinal binary fission. Asymptomatic infected people work as carrier causing distribution of the disease and therefore have epidemiological importance. Since determination of trichomoniasis prevalence rate can be warning of STD distribution and because no similar study was carried out in the Dehloran County we decided to evaluate the prevalence rate of the parasite in the region. In this descriptive study 600 women referred to health treatment centers were visited for vaginal and cervix by speculum. Samples were collected by cotton swabs and dissolved in 1 ml PBS. Wet smears were prepared from the solutions, stained with Gimsa and studied directly under light microscope. The Trichomoniasis prevalence rates were 14% in condom users, 12% in IUD users, 40% in users of natural way to prevent pregnancy and 34% in women who used other contraceptive methods. The highest rate of trichomoniasis was detected in women who used natural way to prevent pregnancy. The lowest rates of trichomoniasis was detected in women who used IUD and condom for contraceptive purpose. It seems that using condom is the safest method for prevention of the trichomoniasis.

**Keywords:** trichomoniasis, prevalence, Dehloran, women